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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/872,059	06/01/2001	Lin Yang	6024-003	2292
32566	7590	10/28/2004	EXAMINER	
PATENT LAW GROUP LLP 2635 NORTH FIRST STREET SUITE 223 SAN JOSE, CA 95134			MOORE, IAN N	
			ART UNIT	PAPER NUMBER
			2661	

DATE MAILED: 10/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/872,059

Applicant(s)

YANG ET AL.

Examiner

Ian N Moore

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on application filed on 6-1-2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1 and 6 are objected to because of the following informalities. Appropriate correction is required.

Claim 1 recites, " $\delta(\Delta t) \cdot \delta(i,j)$ " in line 6. There is a dot "." Right behind on the top the first $\delta(\Delta t)$. It is suggested to remove the dot ".".

Claim 6 is also objected for the same reason as stated above in claim 1.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Claim 1 recites variables "i", "j" and "t" in line 6-7, "comp" and "rem" in lines 14-16. Since these variables not defined, it is unclear what they represent in a convolution signal formula and a remainder signal formula.

- b. Claim 6 is also rejected for the same reason as above (a) in claim 1.

- c. Claim 1 recites the limitations, "the signal transmission channel" in line 10. There is insufficient antecedent basis for this limitation in the claim.

- d. Claim 6 is also rejected for the same reason as above (c) in claim 1.

- e. Claim 1 recites the limitations "a convolution signal" in line 5 and "a convolution signal" in line 13-14. It is unclear whether a convolution signal recites in line 5 is the same convolution signal as recites in line 13-14.
- f. Claim 6 is also rejected for the same reason as above (e) in claim 1.
- g. Claim 1 recites the limitations "**the** signal transmission channel" in line 3 and "**a** transmission channel" in line 10. It is unclear whether the signal transmission channel recites in line 3 is the same transmission channel as recites in line 10.
- h. Claim 1 recites the limitations "**transmitting at least one padded signal frame** through a transmission channel in **the transmitted signal**" line 10-11 and "the transmitted signal" in line 13. It is unclear whether the frame or the signal is transmitted through a transmission channel.
- i. Claim 6 is also rejected for the same reasons as above (g and h) in claim 1.
- j. Claim 6 recites the limitations, "**the** transmitted signal" in line 10. There is insufficient antecedent basis for this limitation in the claim.
- k. Claim 3 recites the limitations "at least one of said PN sequences" in line 3. It is unclear whether **said PN sequence** recite in claim 3 refers to **a set of pseudo-random signal m-sequence PN** (claim 1, line 4), **a selected sequence PN** (claim 1, line 8), or **one of the sequences PN (claim 1, line 18)** since there are more than one PN sequences recite in claim 1.
- l. Claims 4, 8, and 9 are also rejected for the same reasons as above (k) in claim 3.

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- m. Claim 3 recites the limitations “**said transmission channel**” line 1. It is unclear whether said transmission channel refers to “**the signal transmission channel**” (claim 1, line 3) or “**a transmission channel**” (claim 1, line 10).
- n. Claim 8 is also rejected for the same reasons as above (m) in claim 3.
- o. Claims 2,5, 7 and 10 are also rejected since they are depended upon rejected claim.

Allowable Subject Matter

- 4. Claims 1-10 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ian N Moore whose telephone number is 571-272-3085. The examiner can normally be reached on M-F: 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner’s supervisor, Ken Vanderpuye can be reached on 571-272-3078. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

INM
10/21/04



BRIAN NGUYEN
PRIMARY EXAMINER